

## REMARKS

After entry of this amendment, claims 1-14 are pending in the application. In the office action dated December 30, 2003, the examiner objects to the abstract and disclosure, requiring revision for proper language and format in the abstract, and requiring correction of informalities at page 4, line 1, and at page 4, line 6, in the specification.

The examiner rejects claims 1 and 2 under 35 U.S.C. 102(b) as anticipated by Marshall (US Patent No. 3,078,654); rejects claims 1 and 2 under 35 U.S.C. 102(b) as anticipated by Waters (US Patent No. 3,577,873); and rejects claims 1 and 2 under 35 U.S.C. 102(e) as anticipated by Akopian (US Patent No. 6,035,668). The examiner also rejects claims 1-3 under 35 U.S.C. 102(b) as anticipated by Nicely (US Patent No. 3,565,127).

The examiner allows claims 7-14, and objects to claims 4-6 as being dependent upon a rejected base claim, but would find these claims allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

### *Claim Rejections – 35 USC § 102*

Applicant respectfully traverses the examiner's rejections under 35 U.S.C. 102, as the respective references do not disclose each and every element of the subject claims. A claim is anticipated under 35 USC § 102(b) only if each and every element set forth in the claim is disclosed (i.e., identically described) in a single prior art reference. Applicant will address each reference individually.

#### **Marshall – US Patent No. 3,078,654**

The examiner rejects claims 1 and 2 under 35 USC § 102(b) as being anticipated by Marshall. Marshall, however, fails to disclose all of the recitations of independent claim 1. Claim 1 of the present application recites that the reinforcing threads, helically wrapped,

extend along the main rope body in a single longitudinal direction. However, the looped wrapping process disclosed in Marshall results in the same strand extending in both positive and negative longitudinal directions. Figure 8 of Marshall illustrates three wraps of the reinforcing thread extending longitudinally to the right around the main rope body, followed by three wraps of the reinforcing thread extending longitudinally to the left, and so on. Accordingly, “reinforcing thread helically wound around said main rope body and extending therealong in a single longitudinal direction,” as recited in claim 1 of the present application, is not disclosed in Marshall.

Further, claim 1 recites that the direction in which the reinforcing thread is wound around the main rope body is reversed “at predetermined intervals.” The reversing of the winding direction of the reinforcing thread of Marshall does not take place at predetermined intervals, and Marshall does not disclose, teach or suggest a reversal of winding direction at predetermined intervals. In fact, the specification of Marshall, at columns 3 and 4, discusses “a possible explanation” (col. 3, line 59), not a definitive disclosure, of the reversing of winding direction of the reinforcing thread in Marshall, and suggests that the reversing intervals are random, with loops tending “to be located one on top of another” (col. 4, lines 8-16). In addition, Marshall states that the disclosure provided in the specification for the origin of the intervals of winding direction “must be considered hypothetical” (col. 4, line 20). Accordingly, since the very reason for the winding direction reversal intervals is unknown in Marshall, no control can be exercised over their positioning to predetermine the intervals at which the reversal takes place. This lack of control is emphasized in admissions in the specification of Marshall that the loops “apparently tend to be located one on top of another” (col. 4, lines 8-16), which further illustrates that Marshall fails to disclose, teach or

suggest reinforcing thread wound around the main rope body and extending therealong in a single longitudinal progression. Additionally, Marshall's admission, at col. 4, lines 8-16, teaches away from both "a single longitudinal progression" and a "predetermined interval."

Considering that Marshall fails to disclose, teach or suggest: 1) winding the reinforcing thread around the rope body in a single longitudinal direction: or 2) reversing the winding direction at predetermined intervals, applicant requests that the examiner withdraw the 35 USC § 102 rejections of claims 1 and 2 as anticipated by Marshall. Since claim 2 depends from claim 1, claim 2 is not anticipated for at least the same reasons as discussed above with respect to claim 1. *In re Fine*, 837 F.3d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

**Waters – US Patent No. 3,577,873**

The Examiner rejects claims 1 and 2 under 35 USC § 102(b) as being anticipated by Waters. However, Waters fails to disclose all of the recitations of independent claim 1. For example, Waters does not disclose, teach or suggest a fibre assembly of substantially untwisted fibres.

It is a key element of Waters that the core yarn possess set false twisted synthetic filaments. Columns 2 and 3 of Waters discusses the set false twisted characteristic of the core yarn, and discusses methods of achieving false twisting and reducing the torque resulting therefrom. For instance, at col. 2, lines 3-4, Waters discloses, "[a]lthough possessing a set false twisted, and hence extensible, core component, the core yarn...exhibits no sharply defined yield point..." Also, at col. 2, lines 17-18, Waters discloses, "[t]he core yarn of the invention, owing to its false-twisted components, possesses torque." The Waters specification is devoid of any teaching or suggestion that untwisted yarns could be used in the core.

Since Waters fails to disclose, teach or suggest a fibre assembly of substantially untwisted and parallel fibers, applicant requests that the examiner withdraw the 35 USC § 102 rejections of claims 1 and 2 as anticipated by Waters.

**Nicely - US Patent No. 3,565,127**

The Examiner rejects claims 1-3 under 35 USC § 102(b) as being anticipated by Nicely. However, Nicely fails to disclose all of the recitations of independent claim 1. For example, Nicely does not disclose, teach or suggest at least one reinforcing thread helically wound around the main rope body and extending therealong in a single longitudinal direction, wherein at predetermined intervals the direction in which the reinforcing thread is wound around the rope body is reversed. Nicely is directed to the use of a braid covering (col. 1, lines 67-69), not a helically wound reinforcing thread. Although Nicely states, at col. 1, lines 69-70, that “other conventional methods for covering yarns may be successfully used, and, at col. 2, line 67-68, that binding can occur by “wrapping or braiding a thread around the bundle to maintain its integrity,” Nicely does not disclose, teach or suggest the structure recited in claim 1 (i.e., “at least one reinforcing thread helically wound around said main rope body and extending therealong in a single longitudinal direction, wherein at predetermined intervals the direction in which the reinforcing thread is wound around said main rope body is reversed”).

The braiding disclosed in Nicely does not anticipate the helical winding recited in claim 1. Moreover, the very general references, in Nicely, to alternative “wrappings” (at col. 2, line 67-68) and “other conventional methods for covering yarns” (at col. 1, lines 69-70), do not disclose, teach or suggest the recitations of claim 1. Accordingly, applicant requests that the examiner withdraw the 35 USC § 102 rejections of claims 1-3 as anticipated by Nicely.

**Akopian - US Patent No. 6,035,668**

The Examiner rejects claims 1 and 2 under 35 USC § 102(b) as being anticipated by Akopian. Akopian discloses a warp knit outer sheath such that different surfaces may be provided on different sides of the cord. Akopian does not disclose, teach or suggest helical winding of reinforcing thread in a single longitudinal direction, as recited in claim 1 of the present application.

Helical winding of reinforcing thread in a single longitudinal direction, as recited in claim 1, would not meet the objectives of Akopian's invention because helical winding provides generally uniform exterior surface properties on every side of the fibre. Accordingly, Akopian not only does not anticipate, but teaches away from the recitations of claim 1 of the present application.

The Examiner notes, in office action paragraph 7, "warp knits by nature reverse direction." However, applicant notes that, by nature, warp knits reverse direction longitudinally as well as tangentially to the central core (for example, see Figure 1 of Akopian). Therefore, warp knits, by nature, do not anticipate the recitations of claim 1 (i.e., do not disclose reinforcing fibres extending therealong in a single longitudinal direction). The shaped circular warp-knit cord disclosed by Akopian fails to disclose, teach or suggest both helical wrapping of reinforcing thread and wrapping which extends in a single longitudinal direction. Accordingly, applicant requests that the examiner withdraw the 35 USC § 102 rejections of claims 1 and 2 as anticipated by Akopian.

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*Allowable Subject Matter*

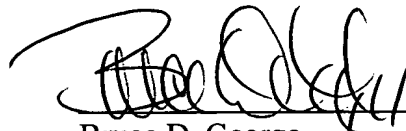
Claims 7-14 are allowed. The examiner objects to claims 4-6 as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant respectfully acknowledges the examiner's objection to claims 4-6, and will rewrite these claims in independent form to include all of the limitations of the base claim and any intervening claims, as necessary, upon examiner's final disposition of the respective base and intervening claims.

**CONCLUSION**

In light of the above remarks, applicant submits that pending claims 1-14 are allowable and requests that examiner issue an early notice of allowance. The examiner is invited to call the undersigned attorney in the event that a telephone interview will advance prosecution of this application.

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Bruce D. George  
Registration No. 43,631

Woodcock Washburn LLP  
One Liberty Place - 46th Floor  
Philadelphia PA 19103  
Telephone: (215) 568-3100  
Facsimile: (215) 568-3439